

Claims:

1. A method of manufacturing molded materials of a thermosetting resin composition in a method of granulating a molding material of the thermosetting resin composition, characterized in that a sheet producing step for transferring the molding material in a molten state to a subsequent stage while processing the same material into a sheet type material of a predetermined thickness, a first processing step for cutting the sheet type material, which has thus been transferred to a stage for carrying out this step, in parallel with the transfer direction thereof to a predetermined width, and thereby obtaining laterally arranged rows of processed bodies of elongated string-like materials, a step of cutting the processed body, which is obtained in the first processing step, to a predetermined length with respect to the transfer direction, a transfer direction changing step for transferring the processed body, which has been subjected to the cutting step, to a subsequent stage by changing the transfer direction of the processed body at 90 degrees with respect to the longitudinal processed body cutting line, and a second processing step for cutting the processed body, the transfer direction of which has been changed, in parallel with the processed body transferring direction to a predetermined width, and thereby obtaining granulated materials are carried out in order.

2. A method of manufacturing molded materials of a

thermosetting resin composition according to Claim 1, wherein a second processing step for making a multiplicity of slits in the transfer-direction-changed processed body after the transfer direction changing step has been carried out, in parallel with the transfer direction of the processed body to a predetermined width, and thereby obtaining a processed body of longitudinally arranged rows of elongated string-like materials having longitudinal slits of a predetermined width, and a step of applying an external force to the processed body of longitudinally arranged rows of elongated string-like materials obtained in the second processing step, and thereby obtaining granulated materials are carried out in order.

3. A method of manufacturing molded materials of a thermosetting resin composition in a method of granulating a molding material of the thermosetting resin composition, characterized in that a sheet producing step for transferring the molding material in a molten state to a subsequent stage while processing the same material into a sheet type material of a predetermined thickness, a first processing step for making a multiplicity of slits in the sheet type material, which has been transferred to a stage for carrying out this step, in parallel with the transfer direction to a predetermined width, and thereby obtaining a sheet type processed body in which a multiplicity of longitudinal slits are formed, a step of cutting the sheet type processed body, which has been obtained in the

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first processing step, to a predetermined length with respect to the transfer direction, a transfer direction changing step for transferring the processed body, which have been subjected to the cutting step, to a subsequent stage by changing the transfer direction of the processed bodies at 90 degrees with respect to the longitudinal processed body cutting line, a second processing step for cutting the processed body, the transfer direction of which has been changed, in parallel with the processed body transferring direction to a predetermined width, and thereby obtaining a processed body of laterally arranged rows of elongated string-like materials in which a multiplicity of lateral slits are formed in a longitudinally spaced manner, and a step of applying an external force to the processed body of laterally arranged rows of elongated string-like materials, which have been obtained in the second processing step, and thereby obtaining granulated materials are carried out in order.

4. A method of manufacturing molded materials of a thermosetting resin composition according to Claim 3, wherein a second step of making a multiplicity of slits after the execution of the transfer direction changing step in the processed body, the transfer direction of which has been changed, in parallel with the transfer direction to a predetermined width, and thereby obtaining a sheet type processed body having generally checker-patterned slits, and a step of applying an external force to the sheet type processed body obtained in

the second processing step, and thereby obtaining granulated materials are carried out in order.

5. A method of manufacturing molded materials of a thermosetting resin composition according to Claim 1, wherein the sheet producing step is carried out by rolling the molding material in a molten state the temperature of which is regulated to a temperature of 70 to 130°C with rolling rolls, obtaining a sheet type material of 70 to 130°C, and transferring the sheet type material to a subsequent stage.

6. A method of manufacturing molded materials of a thermosetting resin composition according to Claim 1, wherein the thermosetting resin is a phenol resin, an epoxy resin, a polyimide resin or a polyester resin.

7. A method of manufacturing molded materials of a thermosetting resin composition according to Claim 1, wherein the granulated materials have a rectangular cross section 0.5 to 4 mm square.

8. An apparatus for manufacturing molded materials of a thermosetting resin composition by granulating a material of the thermosetting resin composition, comprising rolling rolls for rolling the molding material in a molten state into a sheet type material of a predetermined thickness, a first processing unit for processing the rolled sheet type material into a processed body of laterally arranged rows of elongated string-like materials of a predetermined width, or into a sheet

type processed body having a multiplicity of slits extending in parallel with the sheet type material transferring direction, a cutter for cutting the processed body, which has been obtained by the first processing unit, in the processed body transferring direction to a predetermined length, a direction changing unit for changing the transfer direction of the processed body, which has been cut with the cutter, at 90 degrees with respect to the longitudinal cutting line or slitting line of the processed body, and a second processing unit for cutting or slitting the processed body, the transfer direction of which has been changed by the direction changing unit, in parallel with the transfer direction thereof to a predetermined width.

9. An apparatus for manufacturing molded materials of a thermosetting resin composition according to Claim 8, wherein the first processing unit and second processing unit are grooved rolls respectively.

10. An apparatus for manufacturing molded materials of a thermosetting resin composition according to Claim 8, wherein the rolling rolls are provided with scrapers for forcibly peeling off the rolled sheet type processed body therefrom.

11. An apparatus for manufacturing molded materials of a thermosetting resin composition according to Claim 8, wherein the first processing unit and second processing unit are provided with scrapers for forcibly peeling off the processed body or bodies, which are discharged from the respective processing

units, from the rolls.